#### **REMARKS**

The Office Action mailed July 21, 2010, has been carefully reviewed and these remarks are responsive thereto. Claims 1, 2, 9-12, 14, 20-22 and 24 have been amended. Claims 1-4, 9-14, 20-24 and 28-32 remain pending upon entry of this paper. Reconsideration and allowance of the instant application are respectfully requested.

## Claim Rejections Under 35 U.S.C. § 103

Claims 1-3, 9-13, 20-24 and 32 stand rejected 35 U.S.C. § 103(a) as being allegedly unpatentable over U.S. Patent No. 6,265,894 to Reblewski et al. (hereinafter referred to as "Reblewski") in view of U.S. Patent No. 6,064,677 to Kappler et al. (hereinafter referred to as "Kappler") and U.S. Patent No. 5,923,656 to Duan et al. (hereinafter referred to as "Duan").

Claims 4 and 14 stand rejected 35 U.S.C. § 103(a) as being allegedly unpatentable over Reblewski, in view of Kappler and Duan, and further in view of U.S. Pub. No. 2003/0053435 to Sindhushayana et al. (hereinafter referred to as "Sindhushayana").

Claim 28 stands rejected 35 U.S.C. § 103(a) as being allegedly unpatentable over Reblewski, in view of Kappler and Duan, and further in view of U.S. Patent No. 6,198,723 to Parruck et al. (hereinafter referred to as "Parruck").

Claim 29 stands rejected 35 U.S.C. § 103(a) as being allegedly unpatentable over Reblewski in view of Kappler and Duan, and further in view of U.S. Patent No. 6,731,638 to Ofek (hereinafter referred to as "Ofek").

Claims 30 and 31 stand rejected 35 U.S.C. § 103(a) as being allegedly unpatentable over Reblewski in view of Kappler and Duan, and further in view of U.S. Patent Application Publication No. 2003/0099242 to Shah (hereinafter referred to as "Shah").

Applicants respectfully traverse these rejections for at least the following reasons.

## Independent Claim 1 and Dependent Claims 2-4 and 30-32

Amended independent claim 1 recites, among other features, the following (emphasis added):

circuitry, coupled to the storage unit, operative to generate and <u>transmit a message</u> <u>outside the reconfigurable emulation integrated circuit</u>, <u>the message</u> assembled in accordance with the signal inclusion schedule and <u>comprising a plurality of emulation signals</u>, wherein the signal inclusion schedule selects the plurality of emulation signals from at least one pin when the message is assembled and specifies the order and frequency of occurrence of each of the plurality of emulation signals in the message.

In rejecting claim 1, the Office Action relies on a proposed combination of Reblewski, Duan, and Kappler. The Office Action's alleged combination of Reblewski, Duan and Kappler, even if proper, does not teach or suggest all features of claim 1. (Office Action, pages 2-3.) For example, the Office Action, at page 2, concludes that Reblewski "does not teach a storage unit comprising a signal inclusion schedule or circuitry operative to generate and transmit a message." Instead, the Office Action appears to rely on Kappler for these features, and Duan for the features of claim 1 related to "select[ing] the plurality of...signals from at least one pin." (Office Action, pages 2-3.) Kappler is related to "packet switched communication networks and, more particularly, to traffic shaping for causing the time multiplexed packet flows at queuing points within such networks or network elements to conform to specified traffic descriptors." Kappler, col. 1, ll. 12-16. Duan is related to "a switching apparatus for conducting an efficient scheduling of ATM (asynchronous transfer mode) cells to resolve contentions in a cell traffic matrix." Duan, col. 1, 11. 5-9. Neither Duan nor Kappler teaches or suggests "emulation signals" as recited in claim 1. Indeed, the packet switched communication network of Kappler fails to contemplate a "message assembled in accordance with the signal inclusion schedule and comprising a plurality of emulation signals," as recited by claim 1. Similarly, the ATM network of Duan fails to contemplate a "message assembled in accordance with the signal inclusion schedule and comprising a plurality of emulation signals," as recited by claim 1.

Moreover, in neither Kappler nor Duan is there a teaching or suggestion that any message, one that includes or does not include emulation signals, is "transmit[ted]...outside the reconfigurable emulation integrated circuit," as also recited by claim 1. Indeed, both Kappler and Duan fail to contemplate any reconfigurable emulation integrated circuit.

Additionally, The Office Action's basis for combining Reblewski, Duan and Kappler is improper. For example, the Federal Circuit has repeatedly stated that the limitations of a claim in a pending application cannot be used as a blueprint to piece together prior art in hindsight *In* 

re Dembiczak, 50 U.S.P.Q. 2d 1614 (Fed. Cir. 1999). "[R]ejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418, 82 U.S.P.Q. 2d 1385, 396 (internal citations omitted); see also MPEP § 2143.01. The Supreme Court has also cautioned that one must be careful to avoid "the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning." KSR, 550 U.S. at 421. [I]f the proposed modification would render the prior art being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 U.S.P.Q. 1125 (Fed. Cir. 1984).

The Office falls well short of its burden in providing an articulated reasoning with some rational underpinning to support the legal conclusion of obviousness under § 103. For example, the Office Action fails to provide an articulated reason with some rational underpinning to combine Reblewski with either Duan or Kappler.<sup>1</sup>

In combining Reblewski and Duan, the Office Action, on page 3, states "It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the scheduler disclosed in Duan with the reconfigurable integrated [circuit] disclosed in Reblewski...in order to maximize transmission opportunities for available ports in an ATM switch fabric." This provided reasoning is not an articulated reasoning with some rational underpinning that would cause one of ordinary skill in the art to modify Reblewski with Duan, as required by § 103.

In combining Reblewski and Kappler, the Office Action, on pages 2-3, states "It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the scheduling and transmission taught in Kappler on the reconfigurable integrated circuit taught in Reblewski in order to reduce data transport unit delay variations in time-multiplexed outputs from output queued routing mechanisms." This provided reasoning is not an articulated reasoning with some rational underpinning that would cause one of ordinary skill in the art to modify Reblewski with Kappler, as required by § 103.

<sup>&</sup>lt;sup>1</sup> The Office Action relies on Reblewski only for the preamble of claim 1. For all other features of claim 1, the Office Action relies on Duan and/or Kappler.

Accordingly, for at least these reasons, one of ordinary skill would not combine Reblewski with either Kappler or Duan, in the manner proposed by the Office Action. Therefore, the Office Action's basis for combining Reblewski, Duan and Kappler is improper.

Claim 1 distinguishes over the Office Actions's alleged combination of Reblewski, Duan and Kappler, and is in condition for allowance for at least the above reasons.

Dependent claims 2-4 and 30-32 all depend from claim 1, and are allowable over the Office Action's alleged combination of Reblewski, Kappler and Duan for at least the same reasons as claim 1. Any addition of Sindhushayana and Shah, while cited for other features, fails to cure the deficiencies of the Office Action's alleged combination of Reblewski, Kappler and Duan. Additionally, dependent claims 2-4 and 30-32 are allowable over the cited documents further in view of the various novel and non-obvious features recited therein. For example, claim 2 recites features related to the "emulation signals," such as "the frequency of occurrence specified by the signal inclusion schedule is based on a determination that particular emulation signals in the message are more critical than other emulation signals in the message." In its rejection of claim 2, the Office Action relies on Kappler as allegedly describing the features of claim 2. (Office Action, pages 3-4). As discussed above with respect to claim 1, Kappler does not teach or suggest "emulation signals." From this, it also follows that Kappler fails to teach or suggest "the frequency of occurrence specified by the signal inclusion schedule is based on a determination that particular emulation signals in the message are more critical than other emulation signals in the message," as recited by claim 2, as well as other "emulation signal" features of claim 2.

# Independent Claims 9, 20 and 24, and Dependent Claims 10-14, 21-23, 28 and 29

Amended independent claims 9, 20 and 24, while different in scope, all recite features similar to claim 1, and are allowable over the Office Action's alleged combination of Reblewski, Kappler and Duan for at least reasons analogous to those discussed above with respect to claim 1. Dependent claims 10-14, 21-23, 28 and 29 all depend from one of claims 9, 20 and 24, and are allowable over the Office Action's alleged combination of Reblewski, Kappler and Duan for at least the same reasons as their respective base claim. Any addition of Sindhushayana, Parruck and Ofek, while cited for other features, fails to cure the deficiencies of Reblewski, Kappler and

Duan. Additionally, dependent claims 10-14, 21-23, 28 and 29 are allowable over the cited documents further in view of the various novel and non-obvious features recited therein. For example, claims 10, 11, 12 and 21 all recite features related to "emulation signals" and the Office Action relies on Kappler as allegedly describing features of claims 10, 11, 12 and 21 that relate to the "emulation signals." As discussed above with respect to claims 1 and 2, Kappler does not teach or suggest "emulation signals." From this, it also follows that Kappler fails to teach or suggest the various "emulation signal" related features of claims 10, 11, 12 and 21.

As one example, claim 10 recites language similar to claim 2, and is similarly allowable. As another example, claim 11 recites "the message comprises state values of the plurality of emulation signals." Kappler fails to teach or suggest this feature. As yet another example, claim 12 recites "the message is received and disassembled in a plurality of clock cycles of an operating clock that is independent of an emulation clock of the plurality of emulation signals." Kappler fails to teach or suggest such features. As another example, claim 21 recites "a message receive and disassembly block in communication with the input pin and the reconfigurable logic resource, operative to receive a message and extract second emulation signals from the message in accordance with a second signal inclusion schedule." Kappler fails to teach or suggest such features.

## **CONCLUSION**

All rejections having been addressed, Applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicit prompt notification of the same. Should the Examiner find that a telephonic or personal interview would expedite passage to issue of the present application, the Examiner is encouraged to contact the undersigned attorney at the telephone number indicated below. Applicants look forward to passage to issue of the present application at the earliest convenience of the Office.

Respectfully submitted, **BANNER & WITCOFF, LTD.** 

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